linked to intervals between AM PAC CAT administrations. Mixed models were utilized to evaluate associations between interval AM PAC CAT changes and metastasis characteristics.
Results.– Location in the cerebellum ($P = 0.02$) or brainstem ($P = 0.05$), diameter of largest metastasis ($P = 0.05$), and receipt of whole brain radiation ($P = 0.01$) were associated with changes in AM PAC CAT scores. The mean decrease in AM PAC CAT score associated all variables exceeded the AM PAC CAT minimally important difference of 2.0.
Discussion and conclusion.– Patients with brain metastasis in the brain stem or cerebellum, or treated with whole brain radiation therapy should be referred for rehabilitation services.

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Impact of comprehensive rehabilitation treatment on functional assessment and quality of life in patients with brain tumours

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Keywords: Oncology; Physical exercises; Cancer; Rehabilitation
Background.– Brain tumours patients characterized by high and uncertain prognosis, however, require rehabilitation because of accompanying neurological disorders. Occupational therapy and physiotherapy are an integral part of rehabilitation in cancer patients, which may have an impact on quality of life (QoL). The aim of study was assessment of rehabilitation on QoL and functional measures of patients with brain tumours.
Material and methods.– We presented the experience of the application of physical exercises and occupational therapy in 32 patients. The outcomes were measured based on scales: FIM, Disability Rating (DRS), Karnofsky (KPS) and FACT-Br applied on admission and after treatment (6 weeks).
Results.– Improvement in total functional outcome was indicated by all functional measures (FIM: $F = 46.4$, $P < .05$; DRS: $F = 19.5$, $P < .05$; KPS: $F = 10.1$, $P < .05$). Significant improvements were found between admission and discharge scores for the FIM and DRS. All admission and discharge functional scales (FIM, DRS, KPS) correlated significantly with each other. No significant change was noted in the FACT-Br between admission and discharge scores.
Discussion.– Patients with brain tumours experienced changes in function and QoL during their disease course and treatment. Rehabilitation services may offer a unique opportunity to influence both functional outcome and more closely assess QoL in these individuals.

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Head and neck cancer related paralysis and quality of life: An observational study

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Keywords: Head and neck cancer; Secondary paralysis; Quality of life
Introduction.– Head and Neck Cancer (H&NC) often causes disability [1]: our observational study evaluated secondary paralysis and Health Related Quality of Life (HRQoL) in an H&NC population.
Material and methods.– From 01.01.12 to 30.11.13, we enrolled 31 H&NC Italian patients. Inclusion criteria were: age 18–85, no metastasis, no severe comorbidities, no other cancer, informed consent. Data were: sex, age, BMI, radiotherapy) HRQoL with SF12 and secondary paralysis.
Results.– Female 25%, male 75%, median age 55, median BMI 25.75; the cancer sites were oral cavity 50%, parotid gland 22%, pharynx 9.4%, larynx 18.5%; unilateral neck dissection was 84.4% and bilateral 15,6%; at T0: SF12 PCS average 42.16 (SD 9.4) MCS average 50 (SD 11.1), facial paralysis 85%, accessory paralysis 55%; at T1: SF12 PCS average 42.6 (SD 9.6) MCS average 52 (SD 12.1), facial paralysis 70%, accessory paralysis 50%.
Discussion.– Facial and accessory paralysis effective treatment improves HRQoL and avoid social disadvantages.
Reference
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Long thoracic nerve injury in breast cancer patients: Electromyography and course

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Keywords: Winged scapula; Long thoracic nerve; Breast cancer
Introduction.– The winged scapula is a complication of axillary surgery in breast cancer patients due to a long thoracic nerve injury. The scapula becomes unstable and causes pain, weakness and shoulder dysfunction.
Material and methods.– Prospective observational study of breast cancer patients surgically treated between 2008 and 2011. Patients were evaluated at the 1st, 6th and 12th post-surgical months. An electromyography study was done when a winged scapula was observed. The risk factors were analyzed for socio-demographic data, breast and nodal surgery, surgical complications, tumor characteristics, chemotherapy, hormonal therapy and radiotherapy.
Results.– Among the 258 included patients, there were 39 with winged scapula (15.1%). The nerve injury was confirmed by electromyography in 30 patients (11.6%). There were 27 partial and 3 severe axonotmesis. The group with nerve injury had significant smaller body mass index (26.2 vs 28.2, $P = 0.045$). No other significant differences were observed. At 12 month after surgery, the electromyography was normalized in 21 cases (70.0%). Patients recovered at 12 month were 13.5 years younger than the not recovered (95% CI 27.263–0.211, $P = 0.53$).
Discussion.– In most cases, the lesion was a partial axonotmesis, recovered at 12 months. The only risk factor identified was a smaller body mass index.

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Regular physical exercises for biochemical parameters and inflammatory marker levels in prostate cancer patients during radiotherapy - A randomized clinical study

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